

REMARKS

Claims 1-36 were pending, with claims 1-32 standing withdrawn and claims 33-36 being rejected in the Office Action. In response, claims 33 and 36 have been amended. Accordingly, upon entry of this amendment, claims 1-36 remain pending; with claims 1-32 standing withdrawn and claims 33-36 remaining under consideration. Reconsideration and allowance are respectfully requested.

Claims 33-36 have been were rejected under 35 U.S.C. § 112, first paragraph, the Examiner stating that the specification is enabling for carbonate, phosphate, silicate, borate and hydroxide but does not reasonably provide enablement for other alkaline reactants.

In response, claim 33 has been amended to recite that the alkaline reactant includes at least one of carbonates, phosphates, silicates, borates and hydroxides. Accordingly, it is respectfully submitted that claim 33 recites only reactants that are supported and enabled by the specification. Claims 34-36 depend from claim 33, and therefore include all of the limitations of claim 33, including the recitation of alkaline reactants that has now been added to claim 33. Accordingly, it is respectfully submitted that the rejection of claim 33-36 under 35 U.S.C. § 112, first paragraph should be withdrawn.

Claims 33-36 have been rejected under 35 U.S.C. § 112, second paragraph, with the Examiner stating that it is unclear how the alkaline reactant is selected to raise the pH of the cleaning compound, which includes both peroxide and the alkaline reactant. Further, the Examiner states that claim 33 is indefinite for lacking a positive step of cleaning a surface of a food processing environment; claim 34 is indefinite for being unclear regarding what is meant by “high-foaming” and claim 36 is indefinite for being unclear regarding whether the composition of both the peroxide and the alkaline reactant is dry or whether it is only the alkaline reactant that is dry, and whether a dry formulation is applied to the surface or if an aqueous solution is formed first.

In response, claim 33 has been amended to recite that an amount of the alkaline reactant is used sufficient to raise the pH of the cleaning compound into the alkaline range. Since the recited alkaline reactants are themselves alkaline, it is clear that adding the alkaline reactant to peroxide will raise the pH of the compound. The claim now clearly recites that an amount of the alkaline reactant is used sufficient to raise the pH of the cleaning compound into the alkaline range. It is respectfully submitted that one skilled in the art would clearly understand the procedures by which such an amount would be determined based upon the amount of peroxide being used. Further, claim 33 has been amended to recite “to clean the surface” as part of the step of applying the cleaning compound to the surface. It is respectfully submitted that claim 33 now clearly recites a step of cleaning the surface. Accordingly, it is respectfully submitted that claim 33 is both definite and clear, and the rejection of claim 33 under 35 U.S.C. § 112, second paragraph should be withdrawn.

Claim 34 has not been amended, and the rejection thereof under 35 U.S.C. § 112, second paragraph is respectfully traversed. To one skilled in the art, terms such as “non-foaming”, “low-foaming” and “high-foaming” have understood meanings regarding foam generating capabilities for the products described in such terms. For example, U.S. Publication 2003/0078178 (Ramirez) cited by the Examiner and discussed subsequently herein refers to “low-foaming” and “high foaming” more than twenty times, including in the title and claims. Several of the prior art documents discussed in Ramirez et al. also use similar terms in the titles and descriptions. Applicant respectfully submits that to one skilled in the art the term “high-foaming” as used in claim 34 provides a clear, understood meaning of the category of alkaline reactant recited. Accordingly, it is respectfully submitted that claim 34 is both definite and clear, and that the rejection of claim 34 under 35 U.S.C. § 112, second paragraph should be withdrawn.

Claim 36 has been amended to recite that the peroxide and alkaline reactant are dry, and that the cleaning compound is applied in a dry state. Accordingly, it is respectfully submitted that

amended claim 36 is both definite and clear, and the rejection of claim 36 under 35 U.S.C. § 112, second paragraph should be withdrawn.

Claims 33-36 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,320,805 (Kramer et al.).

Kramer et al. teaches a complex compound useful as a cleanser, sanitizer, disinfectant and sporicide. As such, Kramer et al. includes hydrogen peroxide of crystallization and a positively charged phase transfer agent (column 2, lines 14-16). As explained in column 4 of Kramer et al., hydrogen peroxide of crystallization is dissolved in an aqueous solution of a positively charged ion such as a quaternary ammonium salt. The alkaline salts extract a proton from the hydrogen peroxide, leaving the negatively charged hydroperoxide ion. The hydroperoxide ion then becomes intimately associated with a quaternary ammonium ion and its negative charge is effectively neutralized. The result is said to be a synergistic enhancement of the decontaminant and disinfectant properties of the quaternary ammonium salt to form sterilizers when combined with a per-salt (column 4, lines 34-66).

While the resultant material is useful as a cleanser, sanitizer, disinfectant, sporicide, fungicide and sterilizer, the use of positively charged phase transfer agents, such as the quaternary ammonium salts described in Kramer et al., is costly, and the product generated thereby is expensive to obtain and use.

In contrast, as now clearly recited in amended independent claim 33, the present invention includes providing a cleaning compound consisting essentially of hydrogen peroxide and an alkaline reactant including at least one of carbonates, phosphates, silicates, borates or hydroxides. Kramer et al teaches a material formed from hydrogen peroxide and a positively charged phase transfer agent, not essentially of peroxide and an alkaline reactant including at least one of carbonate, phosphate, silicate, borate or hydroxide recited in amended claim 33. The materials used by Kramer et al. are selected to provide a synergistic enhancement of the decontaminant and disinfectant properties of the quaternary ammonium salt to form sterilizers. The simple, yet effective compound of the present

invention is only fractionally as expensive as the compound taught by Kramer et al. Considering that suggested uses of the present invention include the application of the present compound on floors, the cost factor can be significant, and the present invention has advantages over the composition taught by Kramer et al. in providing a much less expensive, yet effective compound for use in food preparation areas. The present invention has further advantages in enabling the cleaning of equipment without corrosive effects, using a compound that can be provided as a premix or as separate reactants and that can be applied as a liquid or dry. Accordingly, it is respectfully submitted that the present invention is neither taught by nor obvious from the teachings of Kramer et al. Reconsideration and allowance of claims 33-36 over the teaching of Kramer et al. are respectfully requested.

Claims 33-36 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Published Application 2003/0078178 (Ramirez et al.).

Ramirez et al. teaches a low-foaming, liquid, single solution of low concentration for cleaning organic soils from equipment. As described in paragraphs [0019] through [0022], the solution of Ramirez et al. includes:

- a) “at least one surfactant from the group of surfactants including alkane sulfonates, alkyl sulfates, alkyl naphthalene sulfonates, polyoxyethylene/polyoxypropylene block copolymers having a polyoxypropylene molecular weight of from about 1500 to about 8500, of which less than about 30% of the total molecular weight is due to the polyoxyethylene portion, and mixtures thereof, in a concentration of from about 0.005% to about 40% w/w of the total solution;”
- b) “at least one active oxygen releasing compound selected from the group consisting of hydrogen peroxide, at least one source of hydrogen peroxide, and mixtures thereof, in an amount effective to produce a hydrogen peroxide concentration of from about 0.005% to about 50% w/w of the total solution;”

- c) “at least one builder in a concentration of from about 0.001% to about 50% w/w, optionally greater than about 0.01% w/w of the total solution; and”
- d) “at least one diluent selected from the group consisting of water, deionized water, and mixtures thereof, to 100% w/w.”

The present invention differs from the teaching of Ramirez et al. in several respects. The present invention is recited to be high-foaming (claim 34). Ramirez et al. is a low-foaming cleaner for clean-in-place applications of equipment (paragraph [0003]). To be useful for such clean-in-place applications the solution must be low-foaming to avoid cavitations in the circulating equipment used. The solution of Ramirez et al. is a low concentration cleaner intended to dislodge soils and includes a surfactant and a builder in addition to an oxygen releasing compound and a diluent. Ramirez et al. does not teach or suggest a method that includes providing a cleaning compound as recited in amended claim 33, the cleaning compound consisting essentially of peroxide and an alkaline reactant including at least one of carbonates, phosphates, silicates, borates and hydroxides. While Ramirez et al. describes a dry particulate formulation, it is not used in a dry state as recited in amended claim 36, but instead is “dissolved at the appropriate dilution rate...to obtain solution.” (Paragraph [0059].) The present invention has advantages in enabling the cleaning of equipment without corrosive effects, using a compound that can be provided as a premix or as separate reactants and that can be applied as a liquid or dry. Accordingly, it is respectfully submitted that the present invention is neither taught by nor obvious from Ramirez et al. and should be allowed.

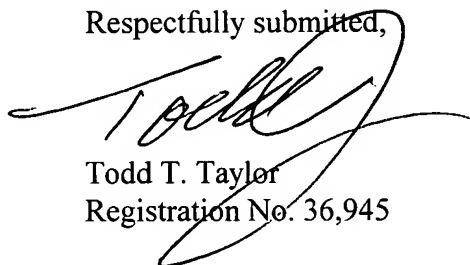
For the foregoing reasons, Applicant submits that the pending claims are definite and do particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Moreover, Applicant submits that no combination of the cited references teaches, discloses or suggests the subject matter of the amended claims. The pending claims are therefore in condition for

allowance, and Applicant respectfully requests withdrawal of all rejections and allowance of the claims.

In the event Applicant has overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicant hereby conditionally petitions therefor and authorizes that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (260) 897-3400.

Respectfully submitted,



Todd T. Taylor  
Registration No. 36,945

Attorney for Applicant

TTT5/dc/mb

TAYLOR & AUST, P.C.  
142 S. Main Street  
P.O. Box 560  
Avilla, IN 46710  
Telephone: 260-897-3400  
Facsimile: 260-897-9300

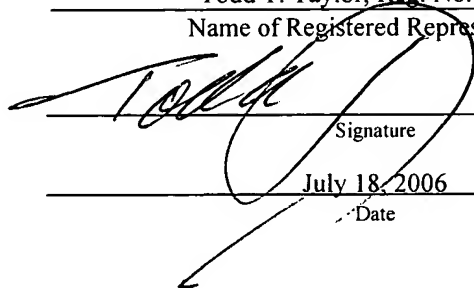
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Date